

Biannual National Update on Programs and Projects

February 2003

Core Operations

Infrastructure

With construction funds provided only in the last few years' appropriations, the National Marine Sanctuary Program (NMSP) is in the beginning stages of developing visitors centers and other facilities. Interpretive centers are being completed for the proposed Northwestern Hawaiian Islands Sanctuary and the Florida Keys Sanctuary. A ten-year facility plan for each sanctuary and the program as a whole has been completed in cooperation with Booz-Allen. A small boat plan to manage the development and operation of the sanctuary fleet has been developed and the NMSP is moving forward with the design of a vessel for the Channel Islands Sanctuary that will serve as a prototype for vessel for other sites.

International Projects

The NMSP is engaged in a number of international projects. An exchange and technical training program with South Africa was completed in mid-2002, with the sharing of management planning techniques and experience. Ongoing projects with Vietnam and South Korea have included technical workshops on marine protected area operation in-country attended by staff from the NMSP. Technical training and exchange programs are also being developed with Italy and Australia's Great Barrier Reef Marine Park Authority. Through the authority of NAFTA's Council for Environmental Cooperation, the NMSP is also a partner in several projects with colleagues from Canada and Mexico.

National Marine Sanctuaries Act Reauthorization

The National Marine Sanctuaries Act (NMSA) is reauthorized every four years, the last time being in 2000 and the next due in 2004. Identification of issues that need to be addressed in this reauthorization and preparation of an administration bill are underway. At the appropriate time, the NMSP will put a call out to all the Councils to ask for their input on the preparation of the administration bill.

Program Evaluation

The NMSP is engaged in an effort to develop both site and national performance assessment criteria. Performance criteria for the sites are being developed as the management plan for each sanctuary is reviewed and updated. Performance criteria for the NMSP as a whole are being developed in the form of a national "report card," which is expected to be in use by the end of FY03 (October 1, 2002 to September 30, 2003). The report card uses a three-level scoring system (performing at high, moderate, or low level) for a number of criteria that cover every aspect of sanctuary operation.



Regional Coordination

As part of its continuing evolution, the NMSP has created three regional coordinator positions for the East Coast (Brad Barr), West Coast (Todd Jacobs), and Pacific (Allen Tom). These regional coordinators are intended to help organize planning and activities on a region-wide basis and help cement the network identity of the NMSP. The coordinators do not have supervisory authority but can be considered an interim step as the NMSP considers the creation of a regional structure in its long-term future.

Staff Development

The NMSP continues to support its commitment to maintaining a skilled, efficient, knowledgeable, credible, and satisfied staff. An extensive and progressive training policy was completed in August 2002. Nearly all Sanctuary Managers and senior staff have undergone intensive leadership training, and other members of the NMSP family are engaging in a wide variety of training. The NMSP is proud to have had one staff member (Helen Golde) in last year's highly competitive NOAA Leadership Competencies Development Program and two staff members in this year's program (Brady Phillips and Lisa Symons). Additionally, two of our staff members won the prestigious NOAA Administrator's Awards for 2002 (Carol Bernthal and Elizabeth Moore).

Conservation Planning

Policy Development

The NMSP is in the process of developing national policies on artificial reefs, marine zoning, submarine cables, and marine wildlife interactions. These policies are intended to (1) describe the NMSP decision-making process for certain activities such as the establishment of marine reserves, (2) guide the NMSP in its endeavors to educate the public on the appropriateness of certain activities such as fish feeding in sanctuaries, and/or (3) provide NMSP permit guidelines for reviewing applications for activities such as artificial reefs.

These NMSP policies will receive wide formal review, including a notice for public comment in the Federal Register, and close coordination with the National Marine Fisheries Service and other appropriate agencies. At the present time, draft policies on artificial reefs and marine zoning are undergoing internal NOAA review. It is anticipated that NOAA clearance will be obtained sometime this spring. Draft policies on cables and marine wildlife interaction are in final NMSP development; NOAA clearance is expected to begin this spring.

Management Plan Review

Management plan reviews continue to be one of the top priorities for the NMSP. Reviews are ongoing at the Channel Islands, Gray's Reef, and Stellwagen Bank Sanctuaries, with draft management plans expected from those sites later in FY03. The five-year review is nearing completion in the Florida Keys, while the Hawaiian Islands Humpback Whale Sanctuary completed its five-year review in October 2002; the latter site expects to begin a process later in 2003 that will consider the addition of other resources to that sanctuary.

A joint management plan review encompassing the Cordell Bank, Gulf of the Farallones, and Monterey Bay Sanctuaries will focus on preparing action plans for the remainder of this fiscal year. As with other management plan reviews, this effort is being conducted by a closely coordinated team of field and headquarters staff, and is further supported by additional personnel and projects from other parts of the National Ocean Service (NOS), including an

extensive project to characterize the biogeography of the central California region. Other NOS assets have been brought to bear in the ongoing designation process to consider a sanctuary in the Northwestern Hawaiian Islands, including the planning of a science workshop that will help identify and prioritize the science needs (i.e., research, characterization, and monitoring) of that area in May 2003.

Conservation Science

Research

The NMSP recently completed a process to identify and publish the most critical needs for research in each sanctuary, and collectively among regions and networks of sanctuaries. Using expert workshops and surveys administered to each sanctuary, the status of science and priority needs were identified. The resulting document is intended for a variety of audiences, and is expected to provide science guidance to NOAA programs and a number of other agencies for the next two to three years. This document is also being used to develop a programmatic annual operating plan for all research activities across the system of sanctuaries.

Monitoring

The NMSP hosted two planning workshop in 2002 that included invited experts and selected sanctuary staff. The workshops are part of a process to develop framework and implementation plans for system-wide monitoring in the NMSP. The program provides an approach for integrated design, implementation, and reporting from individual marine sanctuaries, networks of sanctuaries, and the sanctuary system as a whole. It allows for tailored monitoring in all sanctuaries, providing information critical to management, while also contributing to and benefiting from other local, regional, and national monitoring programs. It also provides a means to design monitoring programs to address networks of sanctuaries, marine regions, and specific issues or resource types.

Driven by scale-specific questions based on existing threats to priority resources, and system questions applicable at all sanctuaries, monitoring programs will be developed and implemented at multiple spatial scales, with priority given to sanctuary-based monitoring. Key partners operating at relevant spatial scales will support the programs. Local, network, and national reports will document results at appropriate levels of specificity, and incorporate an icon-based scheme to summarize the status and trends for key indicators. The most detailed technical information, and the most applicable to site management, will be reported for individual sanctuaries.

Characterization

A wide variety of site-focused field efforts continue to provide critical characterization information to individual sanctuaries, including work funded by the NMSP (at over \$600,000) and conducted by the NOS's National Center for Coastal and Ocean Science. In an effort to acquire more comprehensive basic characterization data for all sanctuaries, particularly bathymetry and bottom imagery, a planning workshop was organized with the U.S. Geological Survey and the Joint Hydrographic Center and held at the University of New Hampshire in November. The group discussed ways to coordinate their activities and is in the process of developing a proposal that could become an FY05 budget initiative. A phased approach is proposed, including reconnaissance and assessment followed by targeted assessment and classification.

Outreach, Education, and Media Relations

Education

The National Education Team recently held its annual meeting in New Orleans. At the meeting, site education coordinators discussed plans for the upcoming year. This included a planning session on the mini-grants program (a competitive grant process that supports small educational program development projects that have applications throughout the sanctuary system); communication planning to ensure all sites are accurately representing sanctuary policies on a variety of issues; a national student competition program; and developing standards for creating education partnerships with non-governmental organizations. The program also welcomed the new national education coordinator Michiko Martin who started December 30.

National Marine Sanctuary Foundation

The National Marine Sanctuary Foundation is supporting a variety of projects at the national and site level in 2003. Capitol Hill Oceans Week will be held June 10-12 to help raise the visibility of coastal ocean issues with members of Congress. This year's themes will be ocean exploration and education. The Foundation is also developing partnerships with the Walt Disney Corporation, National Aquarium, and the Marine Fish Stewardship Council. At the site level, the Foundation will be supporting events to increase local community support and public visibility of the sites. Examples include the Thunder Bay Tall Ships Festival, Outrigger Hotels at Hawaiian Islands Humpback Whale, Senator Breaux tribute dinner at Flower Garden Banks, MERITO (multi-cultural education) program at Monterey Bay, and a pollution study at Fagatele Bay.

Telepresence Programs

The NMSP's Telepresence Initiative is designed to facilitate a more direct interaction between the public and the sanctuaries. Using interactive technology, including remote operation of camera systems, robots, and underwater vehicles, a variety of informal learning environments can be created combining both live and pre-produced materials. This content will help provide a foundation for future NMSP exhibits in visitor centers, aquaria, museums, and other major outreach locations, as well as allowing a suite of educational products to be developed by both the NMSP and its partners. This summer, a successful pilot telepresence installation went online at Monterey Bay National Marine Sanctuary, linking live camera imagery to an "Immersion Theater" at the Mystic Aquarium in Connecticut.

A workshop held in November 2002, in Mystic, Connecticut, brought together many technical experts experienced in telepresence technologies, including personnel from the NMSP, NOAA's Office of Ocean Exploration, Mystic Aquarium/Institute For Exploration, JASON, and numerous contractors. The group spent two days developing plans for future telepresence installations at Thunder Bay, Florida Keys, and the Channel Islands, as well as discussing improvements to the Monterey Bay pilot. The participants also identified technical hurdles remaining at each location. The workshop outcomes will provide the groundwork for completion of these site plans, down to specific equipment and costs, through individual site workshops to be held throughout the spring.

Volunteer Programs

The NMSP is working with the National Marine Sanctuary Foundation to evaluate existing sanctuary volunteer programs and develop new programs throughout the system. The foundation has contracted with Mary Enstrom who has led The Nature Conservancy's volunteer efforts in Florida. Mary will be traveling to several sanctuary sites this year to evaluate existing programs and site volunteer needs, and work with sanctuary staff on developing new programs that can be adapted system-wide. The NMSP's goal is to develop a system-wide Team OCEAN concept that can be used as a single marketable concept for the many different types of volunteer programs used in sanctuaries.

Other National Programs

Emergency Preparedness/Response Planning

Emergency preparedness and contingency planning are a current priority for the NMSP. SHIELDS—the Sanctuaries Hazardous Incident Emergency Logistics Database System—is an intranet system intended to address the need for the NMSP to have improved access to key information and to provide better planning and response for hazardous/emergency situations. This system has been prototyped at two sites and will be expanded to 4-5 additional sites this fiscal year.

Significant response projects this year included the *Lukenbach* and the *Pacbaroness*. By February 2002, a source was finally identified for the many of the California mystery spills over the last 10-15 years. The 1953 wreck of the cargo ship *SS Jacob Luckenbach*, fully fuelled and laden with materials for the Korean War effort, sits in 176 feet of water, 17 miles off San Francisco Bay in the Gulf of the Farallones Sanctuary. The *Luckenbach* itself is a protected historic resource, but the repeated spills from this vessel impacted the shoreline from Point Reyes south to Morro Bay and also caused significant population-level injuries to listed species such as the snowy plover and the marbled murrelets. Although approximately 29,000 gallons will remain entombed onboard, the removal of 85,000 gallons of oil was both a significant response action as well as a restoration activity. NOAA remains involved in the development of a damage assessment and restoration plan and in the response, which has recently been reopened due to another round of dead oiled birds that have been oiled by the *Luckenbach*.

Another significant response project was the *Pacbaroness*. During NOAA's Sanctuary Quest: West Coast Expedition 2002, a multidisciplinary team of scientists conducted reconnaissance dives to the shipwreck *Pacbaroness* utilizing the U. S. Navy's ROV *Maxrover* tethered to the Navy's research vessel *M/V Independence*. The goals of the expedition were to determine the present condition of the shipwreck and to collect sediment samples of the surrounding area for analysis. The expedition was made possible through a cooperative partnership with the Naval Facilities Engineering Service Center at Port Hueneme, California. The science team included researchers from Channel Islands Sanctuary and NMSP headquarters office, NOAA's HAZMAT division, NOS's Special Projects Office and University of California Santa Barbara - Marine Science Institute.

Enforcement

Another program priority is enhanced enforcement capabilities, which becomes increasingly important as site management plans and regulations are strengthened through the management plan review process. An Enforcement Summit is planned for later in 2003, that will bring together NMSP, NOAA's Office for Law Enforcement, and NOAA's Office of General Counsel for Enforcement and Litigation to address sanctuary enforcement issues. Staff members are preparing a questionnaire that will be used to survey issues and needs at the sites.

Submerged Cultural Resources

The NMSP has undertaken a major new initiative for FY03 to discover, document, protect, manage, study, and interpret submerged cultural resources, including establishing a new center for this work at The Mariners Museum in Newport News, Virginia; the NMSP expects to occupy a new facility on the campus this fiscal year. Submerged cultural resources has emerged as a more fundamental part of the NMSP mission in the past few years as evidenced by the establishment of the Thunder Bay Sanctuary, the discovery of the *Portland* in the Stellwagen Bank Sanctuary, and the series of successful recovery operations at the *Monitor* Sanctuary. The NMSP is making substantial investments in the documentation of these resources inside and outside the sites over the next two years, having recently completed a West Coast shipwreck database and assessment workshop in Santa Barbara and started planning similar projects for the Gulf of Mexico and Great Lakes in the coming months.

Some of the specific projects the NMSP has undertaken this year include:

- *Queen of Nassau* – This early 20th century Canadian fisheries steel patrol boat was found recently in the Florida Keys Sanctuary. The NMSP and its non-governmental partners will be documenting the wreck, removing threatened artifacts, and preparing interpretive material;
- *Portland* – As mentioned above, this and several other significant historic shipwrecks were recently found in the Stellwagen Bank Sanctuary; several cruises are already being planned for later this fiscal year to map, document, and assess the condition of the site. Partners in this effort will include NOAA's Office of Ocean Exploration and Discovery Channel;
- *Monitor* – A very successful salvage operation last summer raised the turret of the *Monitor*, as well as numerous other artifacts. The conservation of the turret has begun and may take as long as ten to fifteen years to complete; and
- Thunder Bay expeditions – Dr. Robert Ballard and his Institute for Exploration have completed several expeditions to the Thunder Bay Sanctuary/Underwater Preserve. The first expedition in summer 2001 made use of side scan sonar to identify targets for further exploration. The second expedition, made this last summer, used remotely operated underwater vehicles mounted with cameras to further explore and document those targets.